

## The Mysterious “Liverpool Rhinoceros”

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With 7 Figures

### Introduction

Hundreds of rhinoceroses have passed through the world's collections of living animals in the past centuries (ROOKMAAKER & REYNOLDS 1985). Among these, there are two specimens whose specific identity has been debated occasionally, because the historical records are obscure. The first of these two controversial specimens lived in the Zoological Garden of Berlin for about ten years after its arrival in 1874. WILLIAM JAMRACH described it in 1875 as a new species, *Rhinoceros jamrachi*, in one of the quaintest publications connected with rhinoceros nomenclature. ROOKMAAKER (1983) referred it to the Indian species, *Rhinoceros unicornis*.

The second rhinoceros with unclear identity was the “Liverpool Rhinoceros”. REYNOLDS (1961) listed it as an example of the Javan species, *Rhinoceros sondaicus*, exhibited in a “Zoo at Liverpool, England”, as follows: “An example was shown in this zoo in 1836. It also travelled all over England and Scotland with a menagerie and was said to stand 4 ft. 8 in. at the highest part of the back.” The attribution to *R. sondaicus* has been the generally accepted identification of this specimen. A different argument was advanced by KOURIST (1970), debated in the discussion below. He noticed some differences between the Liverpool Rhinoceros and the common Indian rhinoceros, which gave rise to the present review.

### Exhibition in Dublin

Only two contemporary printed sources refer to the “Liverpool Rhinoceros”. The first note appeared in the Dublin Penny Journal, in the issue of 29 August 1835. It contained a crude picture of a rhinoceros drawn by “NELSON” and engraved by “R. CLAYTON” (Fig. 1). This is followed by a history of the animal, which may be repeated here:

The above animal, lately exhibited in the Zoological Gardens, is of the Indian species, (*Rhinoceros Indicus*). He was taken about fifteen hundred miles from Calcutta by some Indigo planters (the particular place is not known) where he had, with his mother, been doing great

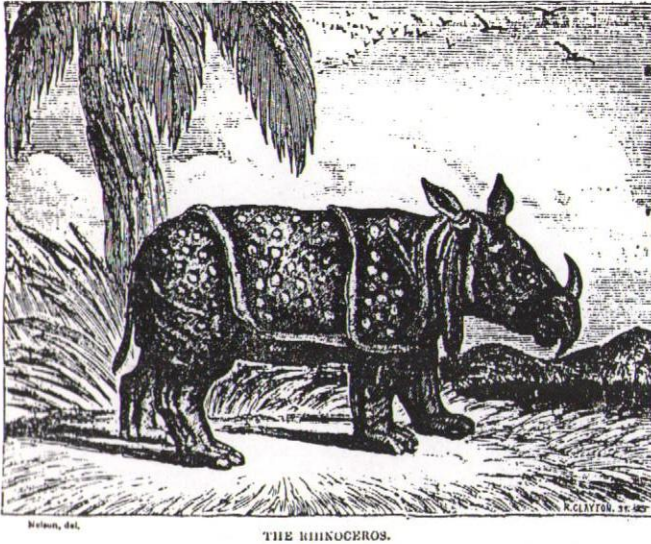


Fig. 1. The small engraving in *The Dublin Penny Journal* of 1834 with the first depiction of the Liverpool rhinoceros

mischief. A pit was prepared, in which both of them were caught. The mother was so savage, that they were obliged to kill her. The young one was sent to Calcutta, where it was shipped on board the WILLIAM FARLEIGH, East Indiaman, for London, and arrived there in June, 1834. It was purchased by Mr. ATKINS of the Liverpool Zoological Gardens for the sum of one thousand pounds. It is at present in excellent health, and has grown four inches in height since his arrival in England, and bulky in proportion. He is now four years old, and it is supposed he will grow till he is twelve. His present height is four feet eight inches; and in length he is nine feet. Notwithstanding the thickness of his skin, he is sensible to the slightest touch of even the smallest stick. He is very indolent, never rising except when driven to do so by the keeper. He does not possess in the least degree the sagacity of the elephant; on the contrary, he appears to be a very heavy dull animal."

Further insight about this animal's stay in Dublin comes from a manuscript history of the Dublin Zoo by T. MURPHY based on the zoo's records. He found that in 1835 the animal was hired from Mr. ATKINS of the Liverpool Zoological Gardens for the sum of £ 150 plus £ 30 a week. After having been exhibited in the zoo for one month, the rhinoceros was returned to ATKINS who was paid £ 140 plus a young llama.

### The Naturalist's Library

The second available printed source about this rhinoceros is the well-known passage (accompanied by two plates) in the "Pachydermes" volume in the popular series of *The Naturalist's Library* published by Sir WILLIAM JARDINE in 1836. JARDINE (1836) gave the following comments in the section about "The Indian Rhinoceros, *Rhinoceros Indicus*. – Cuv.":

Our figures of this animal are taken from a young specimen, belonging to the Liverpool Zoological Gardens, during its late visit to Edinburgh. We give below an account of it, for which we are indebted to a friend, who used considerable pains in taking correct measurements, and ascertaining its habits since it had been kept in confinement."

This "account" is given in smaller print in a footnote:

"... a fourth specimen is at present living, exhibiting in Edinburgh, which I have examined and accurately measured, and has been the occasion of my drawing up this paper. The animal in question is a male, and was brought from Bengal, having been for some time kept in the gardens of the Governor-General at Calcutta. He has been sixteen months in Britain, during which time he has visited London, Glasgow and Edinburgh, and is at present the property of the proprietors of the Zoological gardens at Liverpool. It is stated to be six years old, and to weigh two tons; is a beautiful specimen, and appears to be in the highest state of health."

This is followed by some details of the animals's appearance, 21 different measurements (including the height at the highest part of the back as 4 feet 8 inches) and some general remarks about the animal's behaviour.

This description is illustrated by two plates, both drawn by "STEWART del. t" and engraved by "LIZARS sc." (Figs. 2, 3). Plate 8 (in colour), captioned "Indian Rhinoceros. Liverpool Zool. Gardens", shows a right lateral view of a single-horned rhinoceros with a second rhinoceros visible in the background. Plate 9, having the same caption, shows the animal seated.

The Naturalist's Library was a popular series issued between 1833 and 1843 with numerous reprints (IREDALE 1951). Its success may have been largely due to the experience of its publisher in Edinburgh, WILLIAM HOME LIZARS (1788–1859), who valued speed and economy of production above originality of content (SHEETS-PYENSON 1981). The series was edited by JARDINE, who also authored the volume on elephants and rhinoceroses. Sir WILLIAM JARDINE, seventh Baronet of Applgirth, Dumfriesshire (1800–1874) went to the Edinburgh University, where he became interested in ornithology and generally in natural history. In 1821 he succeeded his father as seventh baronet and went to live at Jardine Hall, where he built up an extensive library and a museum with over 6000 bird species (PITMAN 1981). He was active as an editor and author in his field of interest.

JARDINE's remaining correspondence has not disclosed further information about the rhinoceros described in the "Pachydermes". In the published text, JARDINE mentioned that he owed the account of the rhinoceros in Edinburgh "to a friend". One can wonder who this friend was and why he was not identified by name. Obviously, JARDINE must have had a large number of friends and acquaintances in town, and while only a few would be interested or qualified to measure the rhinoceros, this does not give us enough clues to make a sensible guess. JARDINE's papers do not provide an answer (Dr. S. SHEETS-PYENSON, Montreal, in litt. 1981).

The illustrations in the Naturalist's Library were drawn by JAMES STEWART (1791–1863), employed on a free lance basis, who "executed drawings for about three-fourths of the Library's volumes; in addition he sketched backgrounds and touched up the work of others" (SHEETS-PYENSON 1981). Some of his original drawings of birds are preserved in the Natural History Museum in London (SAWYER 1971). Besides, the National Library of Scotland in Edinburgh preserves two scrap-

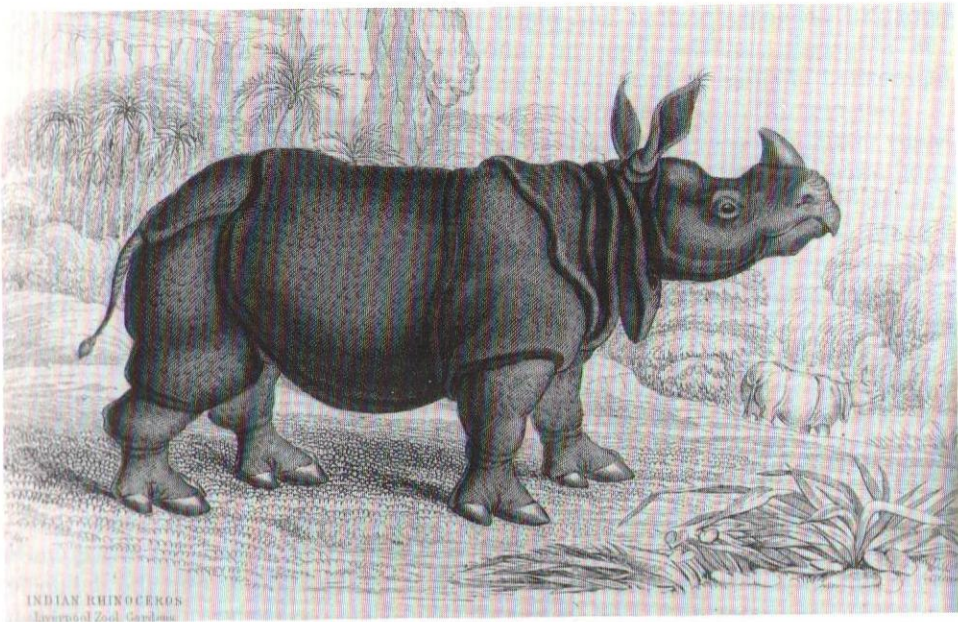


Fig. 2. The Liverpool rhinoceros in a standing position, in The Naturalist Library of 1836 (plate 8)

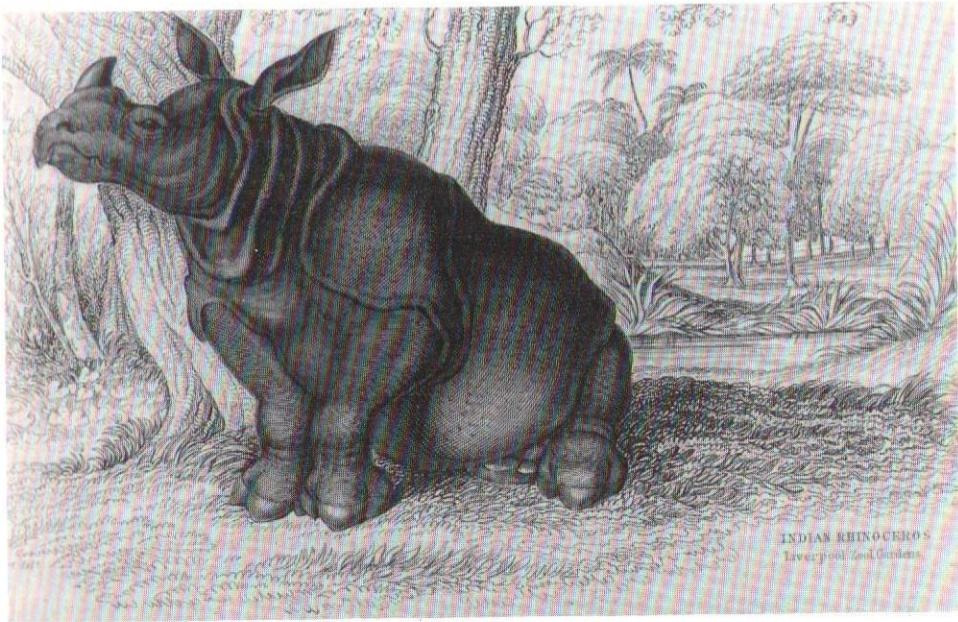


Fig. 3. The Liverpool rhinoceros sitting, in The Naturalist's Library of 1836 (plate 9)

books of original drawings and plates used in the Naturalist's Library (PITMAN 1981). Specific enquiries about the rhinoceros plates revealed that the animal is not represented in either of these two collections.

The value of the illustrations in the Naturalist's Library is far from uniform. Many plates in the various volumes were copied from earlier books, often without good attention to detail. Two examples taken from the recent literature may clarify this. In the volume of the "*Felinae*" (JARDINE 1834), plate 13 showed the snow leopard (*Panthera uncia*) drawn by STEWART, with the acknowledgement that the depiction was copied from BUFFON (1761, pl. 13) "with a slight variation in attitude". RIEGER (1980) knew both BUFFON's and JARDINE's plates, but could not recognise the connection. In another volume (JARDINE 1835, pl. 23), a plate depicting an antelope named "Takhaitze" was stated to be a copy from an aquatint by SAMUEL DANIELL published in 1805. MOHR (1967) could enumerate no less than three important deviations from the original. These two comments concern copies rather than original drawings by STEWART. The two rhinoceros plates were his own work. STEWART also made many drawings of monkeys in the Edinburgh Royal Zoological gardens, which were published in reissues of volume 1 after 1846 (IREDALE 1951). IREDALE's judgement of these original drawings by STEWART is rather more favourable than the evaluation of the copies: "his illustrations and the delightful backgrounds are excellent. That he was very conscientious is shown by his action in the case of the Monkeys."

### The Liverpool Zoological Garden

JARDINE (1836) stated that the rhinoceros belonged to the "Liverpool Zoological Gardens." This was a little known institution rarely included in histories of natural history collections in and around Liverpool (e.g. GREENWOOD 1980). It must not be confused with the menagerie at Knowsley Hall near Liverpool, maintained by Lord EDWARD SMITH STANLEY (1775–1851), 13th Earl of Derby, where no rhinoceros was ever exhibited (LARGEN & FISHER 1986, WOOLFALL 1990).

The Liverpool Zoological Garden started its history in 1832 as reviewed by KEELING (1984). Around 1832 the owner of a travelling menagerie by name of THOMAS ATKINS was looking for a more permanent place to show his collection of living animals. He decided to purchase some land in the city of Liverpool, and soon he was ready to receive the first visitors. The first advertisement of this establishment is found in Gore's Liverpool Directory of 1834 (and one dated 1841 is rather similar; see Fig. 4):

"Interspersed through the grounds are the Grand Menagerie, containing the larger Carnivorous Animals, including Lions, Lion-Tigers, Tigers, Panthers, Leopards, Pumas, Wolves, Hyaenas, Sloths, & c. & c.; a large Stable and Paddock, occupied by The Rhinoceros [and] Three Elephants, one Male and two Females."

In the advertisement, the owner is again identified as Mr. ATKINS. This same name appeared in the transactions about the rhinoceros in Dublin (see above). Besides the name of the man, no particulars about his life have been found. In 1838,

1864.



LIVERPOOL  
ZOOLOGICAL GARDENS.

STRANGERS and Visitors in Liverpool, and the Inhabitants generally, are respectfully informed, that these Gardens are now open daily, from Seven in the Morning till Dusk.

This Establishment is the first of the kind formed in this kingdom, except the London Gardens, and combines unprecedented attractions for the *Naturalist*, the *Botanist*, and the general Visitor, and is situated within half-an-hour's walk of the Exchange. It extends over about ten acres of ground, tastefully laid out in walks, lawns, and shrubberies, and planted with forest trees, shrubs, and flowers of all descriptions.

Interspersed through the grounds are the

**GRAND MENAGERIE,**

containing the larger Carnivorous Animals, including LIONS, LION-TIGERS, TIGERS, PANTHERS, LEOPARDS, PUMAS, WOLVES, HYENAS, SLOTHS, &c. &c.; a large Stable and Paddock, occupied by

**THE RHINOCEROS;**

Three ELEPHANTS, one Male and two Females;

*An Elegant AVIARY,*

With a Choice Collection of Small BIRDS;

An AERIE, for EAGLES, CONDORS, VULTURES, and other Birds of prey; an Extensive

BEAR-PIT,

Occupied by several Specimens of the Ursine Tribe;

*A PHEASANTRY;*

MONKEY-HOUSE, HUTS, ROCKERIES, and LAWNS for GOATS; specimens of Foreign SHEEP and DEER; Stables and Enclosures for ZEBRAS, the TAPIE, KANGAROO, OSTRICHES, the BRAHMIN BULL, the GNU, &c. &c.; together with

**PONDS for PELICANS, SWANS,**

And other AQUATIC BIRDS.

Mr. ATKINS, the Proprietor, is continually adding to his Stock of WILD BEASTS, BIRDS, &c. &c. and he here pledges himself to spare neither pains nor expense to merit a continuance of that patronage, which has been bestowed on the Liverpool Zoological Gardens, by a liberal and discerning Public.

A full MILITARY BAND performs at the Gardens three times a week, during the season.

**TERMS OF SUBSCRIPTION.** £. s. d.

Annual Ticket for a Single Subscriber.....	1	1	0
Ditto for a Family, not exceeding Five Persons.....	3	3	0
Every additional Member of a Family above Four.....	0	7	0
Ditto.....Ditto.....above Six.....	0	5	0

Non-subscribers admitted by Ticket, signed by a Subscriber, on payment of ONE SHILLING each. Strangers in Town may procure Admission Tickets at the principal Hotels, and at the Newspaper Offices.

*Subscribers' Tickets not Transferable.*

Gore's Liverpool Directory, 1841

ADVERTISEMENTS.



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**THE RHINOCEROS;**

A MALE AND FEMALE ELEPHANT.

Two other Stables occupied by a choice variety of QUADRUPEDS.

**AN ELEGANT AVIARY,**

With a splendid Collection of SMALL BIRDS.

An AIRE, for EAGLES, CONDORS, VULTURES, and other Birds of prey.

**AN EXTENSIVE BEAR-PIT,**

Occupied by several Specimens of the URSINE TRIBE.

**A Pheasantry; Monkey-house;**

HUTS; ROCKERIES; LAWNS for GOATS, and specimens of Foreign SHEEP and DEER; Stables and Enclosures for ZEBRAS, the TAPIE, KANGAROO, OSTRICHES, EMEWS, the CASSOWARY, the Brahmin BULL, the GNU, NYLGHAAUS, LLAMAS. A variety of TORTOISES, &c. &c.; together with Ponds for

**Pelicans, Cranes, Black & White Swans,**  
And other AQUATIC BIRDS.

Mr. ATKINS, the Proprietor, is continually adding to his Stock of WILD BEASTS, BIRDS, &c. &c. and he here pledges himself to spare neither pains nor expense to merit a continuance of that patronage which has been bestowed on the Liverpool Zoological Gardens, by a liberal and discerning Public.

A full MILITARY BAND performs at the Gardens three times a week during the Summer season.

**TERMS OF SUBSCRIPTION.** £. s. d.

Annual Ticket for a Single Subscriber.....	1	1	0
Ditto for a Family, not exceeding Five Persons.....	3	3	0
Every additional Member of a Family above Four.....	0	7	0
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A

Fig. 4. Advertisements in GORE's Liverpool Directory of 1834 and 1841 for exhibitions in the Liverpool Zoological Gardens

the Liverpool Zoological Garden published its first guidebook to the collection (ATKINS 1838). This included (p. 27–28) the "Indian Rhinoceros (A Male)": "The present specimen is a remarkably fine lively animal, seven years old, brought from India by Captain POPE, ship Duke of Northumberland." The same text is repeated in a second guidebook of 1841 (ATKINS 1841). The gardens rather deteriorated in the 1850's and they were finally closed in 1863.

### The history of the "Liverpool Rhinoceros"

It now seems possible to summarize the life of the "Liverpool Rhinoceros" from the sources discussed above. It was caught between 1831 (supposed date of birth) and 1833 in India. For some indefinite period it was kept in Barrackpore Park in Calcutta (see BLYTH 1872a) from where it was transported to England. There is some confusion about the name of the ship, which is rather unexpected, but the sources agree in so many other details that we assume that some mistakes were made in the stories about its transport. The rhinoceros arrived in London in June 1834, where it was bought by THOMAS ATKINS for £ 1000. He added the animal to his travelling menagerie which toured (presumably) through the British Isles. Visits of the rhinoceros to Dublin in 1835 and to Edinburgh (and Glasgow) probably in 1835–1836 are on record. In between these tours, and probably after, the animal was kept in the Liverpool Zoological Garden. It was still alive in 1841, but in 1843 its remains were catalogued in the British Museum (see below).

#### The skin

The skin of this rhinoceros was acquired at an unknown date (before 1843) by the Trustees of the British Museum in London. It is first mentioned as a mounted skin in J. E. GRAY'S Catalogue (1843) under *Rhinoceros unicornis*: "a. From Mr. ATKINS'S Menagerie". It is again found in later catalogues as number 88a. Unfortunately, this skin is no longer available for examination. When the first rhinoceros exhibited by the Zoological Society of London, a male Indian Rhinoceros, died on 19. IX. 1849, its skin went to the British Museum. There it was "mounted over that of the Liverpool specimen, which is consequently rendered inaccessible" (SCLATER 1876: 650 note).

GRAY (1843) in his catalogue of specimens in the British Museum at that time only listed the skin of the "Liverpool Rhinoceros", a skull of *Rhinoceros unicornis*, and a few specimens of the two-horned African Rhinoceros. It is, therefore, interesting to point at a drawing made by G. SCHARF in 1845, illustrated by STEARN (1981, pl. 8; see Fig. 5). It shows the great staircase in Montagu House with at the head three stuffed giraffes and an obviously single-horned mounted rhinoceros. If the date is correct, this rhinoceros must have been the one from Liverpool. Unfortunately, the specimen in the drawing is not shown in enough detail to recognise the folds of the shoulder region.

#### The skeleton

The above records about the remains in the British Museum are silent about a skull or bones. BLYTH (1872a) reported that "for many years a male of *R. sondaicus* existed in this country which was never recognized as differing from the large *R. indicus* [= *R. unicornis*]; ... while the skeleton of an adult *R. sondaicus* in the anatomical museum of Guy's Hospital, in Southwark, is in all probability that of the same individual, which was exhibited about the country and finally deposited in the

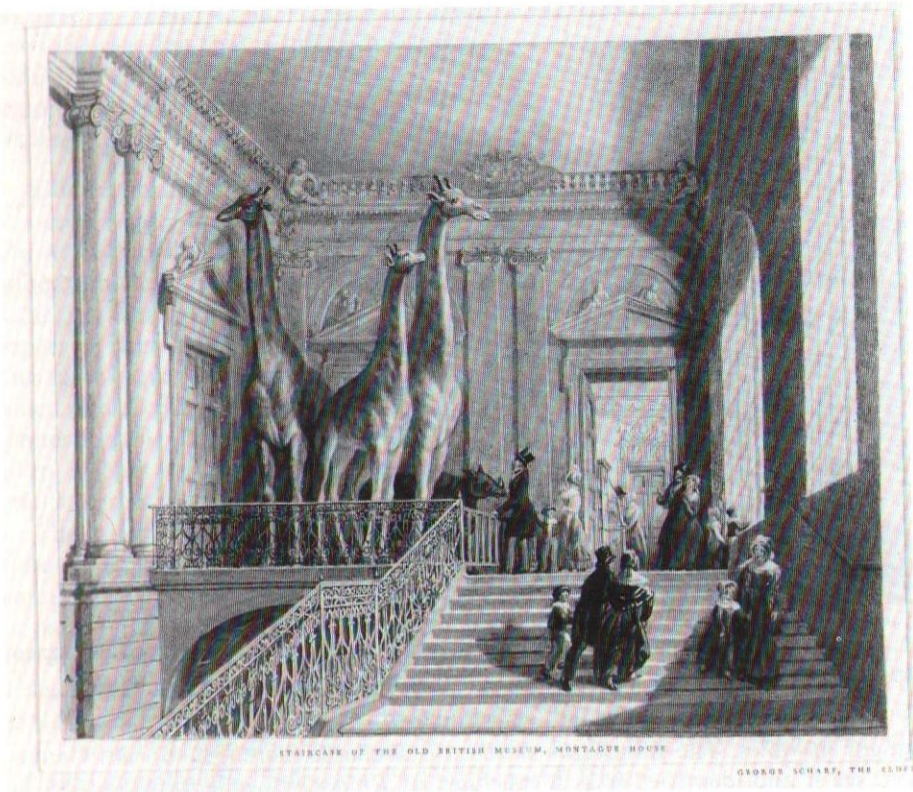


Fig. 5. The great staircase in Montagu House, The British Museum, London, drawn by G. SCHARF in 1845. The rhinoceros should be the mounted skin of the Liverpool rhinoceros

Zoological Garden of Liverpool." A similar statement was included in BLYTH (1872b); GRAY (1868) earlier indicated that "Mr. BLYTH informs me there is a skeleton of *R. sondaicus* in the Anatomical Museum of Guy's Hospital, called *R. indicus*." It is not immediately clear where this information was obtained. EDWARD BLYTH (1810–1873) was in Calcutta from 1841 to 1863 as curator of the Museum of the Asiatic Society of Bengal (FISH & MONTAGU 1976). Before that, he was schooling and working in the London area. It is, of course, possible that he saw the rhinoceros in London in 1834 or later during its tours or in Liverpool, but it is unlikely, because BLYTH does not mention the event. We may assume that the identity of the skeleton in Guy's Hospital with the "Liverpool rhinoceros" was based on hearsay, not on personal observation. He added the words "in all probability", which would appear to substantiate that conclusion. BLYTH, of course, was an acknowledged expert on rhinoceros taxonomy, who in 1862 published his "Memoir on the living Asiatic species of Rhinoceros", one of the more important landmarks in rhinoceros history.

The skeleton is no longer in Guy's Hospital in London. When C. P. GROVES recently tried to discover its whereabouts, he found that the zoological specimens of the hospital were donated in the 1920's to the Zoology Department of the University

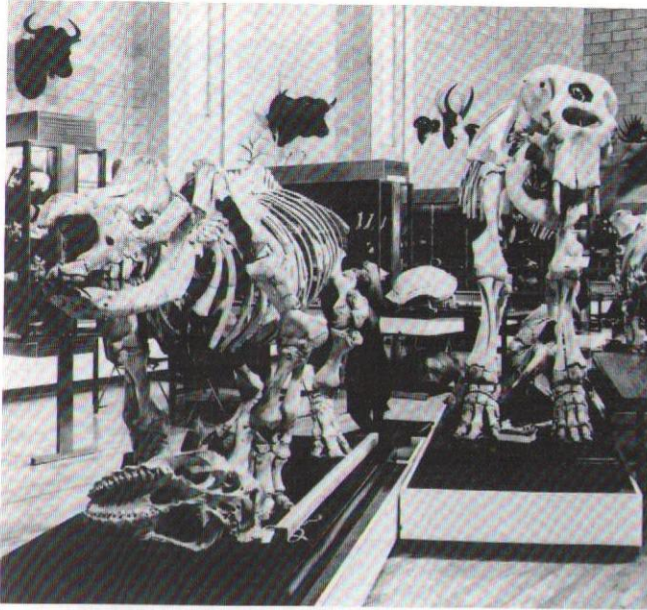


Fig. 6. Skeleton presumably of the Liverpool rhinoceros exhibited in the museum of the Bangor University, England

of Bangor in Wales. The rhinoceros skeleton is available there (Fig. 6). Dr. GROVES went to see it and identified it as a specimen of *Rhinoceros unicornis* (GROVES, in litt.). The skull was not yet physically mature:  $P^4$  is not yet in occlusion and  $M^3$  has not started to emerge.

**Discussion:** specific identity of the "Liverpool Rhinoceros"

The various ideas about the specific identity of the Liverpool Rhinoceros can now be discussed. This is important, because if it were an example of *Rhinoceros sondaicus*, it would have been a remarkable and noteworthy exhibit. KOURIST (1970) mentioned two "problem-rhinoceroses", one of which was the Liverpool Rhinoceros. He recognised that the animal on JARDINE's plates showed some resemblance to the Indian Rhinoceros (regarding the general appearance, the bib and the typical bumps of the skin) as well as to the Javan Rhinoceros (regarding the characteristic triangular neck fold). Apparently, earlier I misrepresented his further arguments concerning the taxonomic translation of the above valid observation, in saying that the Liverpool Rhinoceros was intermediary between the Indian and Javan species. Others may be able to understand KOURIST's suggestion better. KOURIST, however, correctly pointed at the anomaly in the representations of the specimen. It is necessary, therefore, to review the evidence concerning its provenance and its identification.

**Distribution.** The Liverpool Rhinoceros was caught in the sphere of influence of Calcutta. This means somewhere in the North-East of India or in the present

Bangladesh. The Dublin Penny Journal said that it was captured some 1500 miles from the city, but that distance does not sound accurate enough to be helpful. The review by ROOKMAAKER (1980) showed that both single-horned species lived in that region and without further particulars, the stated distribution cannot help to decide between them.

**Contemporary identifications.** While the "Liverpool Rhinoceros" was alive, it was consistently identified as an Indian Rhinoceros. It is probable that the owner, Mr. ATKINS, believed it to be an Indian Rhinoceros, because it came from India, and nobody challenged that view. After the animal's death, its remain went to various institutions. The skin went to the British Museum, and J. E. GRAY (who also published papers on rhinoceros taxonomy) had no scruples in assigning it to the Indian species. The same view is evident from his later decision to mount the Indian Rhinoceros which had died in the London Zoo on top of the mounted skin from Liverpool. It is questionable that such a decision to hide a specimen from view would have been taken, if there were any doubt that they belonged to the same species. The conclusion would be that the Liverpool Rhinoceros was an examples of *Rhinoceros unicornis*.

The statements by BLYTH about the identity of the skeleton in Guy's Hospital are more controversial. It must be remembered that BLYTH apparently was the first to claim that the Liverpool Rhinoceros belonged to the Javan species. His evidence, as far as he published it, is far from convincing. He based himself on a skeleton, which was only "probably" the same specimen. If BLYTH in fact was correct, and if this skeleton is the same as the one presently in Bangor, the debate could be solved instantly, because the skeleton was recognised as that of *Rhinoceros unicornis* by Dr. C. P. GROVES. However, there remains some doubt that the skeleton in Guy's Hospital actually once belonged to the Liverpool Rhinoceros.

**Illustrations.** The only known plates of the "Liverpool Rhinoceros" are the crude sketch in the Dublin Penny Journal of 1834 and those published in JARDINE'S Naturalist's Library of 1836. When discussing these depictions, one assumes that the artist drew all characteristics accurately and reliably. This generally is the best attitude, but some care must be taken. Artists are (often) no zoologists and they cannot understand all implications of what they draw. It should always be discouraged to base far-reaching conclusions on (older) drawings and plates, made in circumstances very different from those of today.

The more obvious morphological differences between the Javan and Indian rhinoceros are their respective sizes and the arrangement of the skin folds. In *R. unicornis*, the subcaudal fold on the rump always joins the pelvic fold; in *R. sondaicus* there is some variation, but usually there is some space between the two folds. The mature males of *R. unicornis* have an extension of skin under the throat, called "Kehlwanne" (German) or "bib" (English); *R. sondaicus* lacks the bib. In *R. sondaicus* some neck folds (i.e. the two parts of the cervical fold) form a distinct "saddle" apparently lying on top of the shoulders. This saddle is never seen in *R. unicornis*.

In JARDINE'S plate 8 with the rhinoceros in right lateral position we can see a connection between the subcaudal and pelvic folds, a bib below the throat, and an indication of a saddle on the shoulders. In plate 9 with the animal in a sitting attitude none of these features is visible.

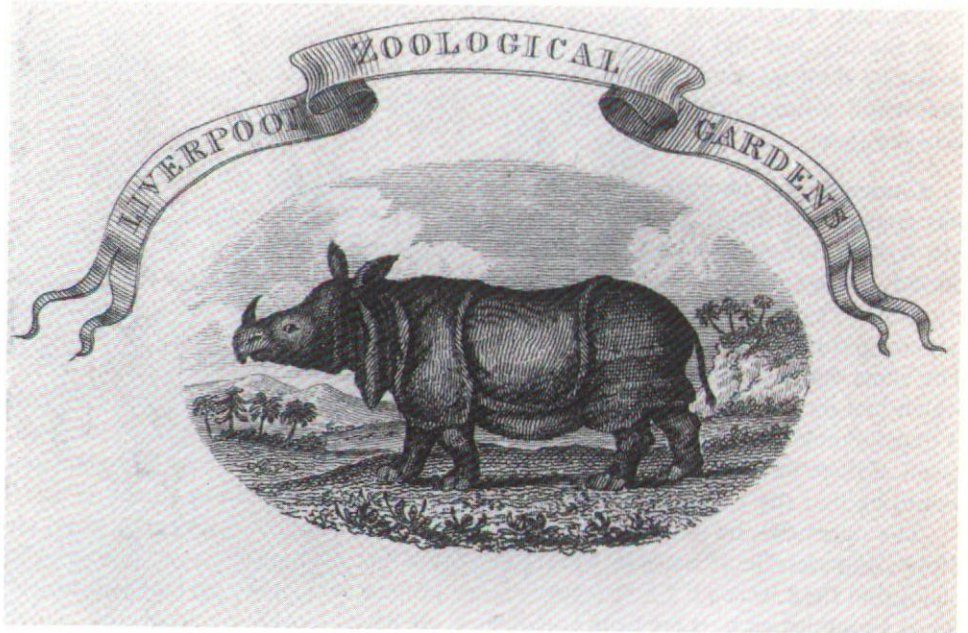


Fig. 7. Vignette in a guide-book of the Liverpool Zoological Gardens

### Conclusion

In reviewing all information presented above, I have no doubt that the Liverpool Rhinoceros was an example of the Indian species, *Rhinoceros unicornis*. The claim by BLYTH concerning the skeleton in Guy's Hospital is refuted by the examination of the same skeleton now in Bangor, which proves it to be a young male *R. unicornis*. One of the plates published by JARDINE shows an indication of the saddle in the shoulder region, typical of the Javan species. This feature, however, is not as distinct as we can see it in modern pictures of the species; furthermore, it is absent from the second plate in JARDINE. I suggest that this anomaly in the drawing alone is not sufficient evidence to identify the animal as a Javan Rhinoceros.

### Summary

The Liverpool Rhinoceros was exhibited in various places in Great Britain from June 1834 to 1841 – 1843. The discussion about its specific identity considered two plates in Jardine Naturalist's Library published in 1836 and a reference to the skeleton by EDWARD BLYTH. The life of this rhinoceros is discussed and all known illustrations and references are studied. It is probable that the specimen was not a Javan rhinoceros (*Rhinoceros sondaicus*), but belonged to the Indian species (*Rhinoceros unicornis*).

### Acknowledgements

This review has been in preparation for many years as many details remained elusive. I am thankful to the cooperation of assistance of Dr. COLIN P. GROVES on taxonomic issues, and of Mr. C. H. KEELING, Dr. PETER J. H. VAN BREE and Drs. FLORENCE PIETERS. Mr. T. H. CLARKE once gave

me a copy of the rhinoceros volume of The Naturalist's Library. The Liverpool Record Office provided details about the Liverpool Zoological Gardens. The drawing by SCHARF in Fig. 5 is reproduced by permission of the Trustees of the British Museum, London. After this paper was accepted, all original photographs were lost in the mail. I owe a great gratitude to Dr. IAN WALLACE and his staff at the Liverpool Museum, who then graciously provided original photographs of the animal which were used in an exhibition on the rhinoceros in that museum. Figures 2, 3, 6, 7 are reproduced by courtesy of the Liverpool Museum.

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